

## AMENDMENTS

### Amendments to the Claims

Please amend the claims as follows:

1. (Currently Amended) A method implemented on a processor and a memory programmed for autonomic identification of an optimum hardware configuration for a Web infrastructure, said method comprising ~~the steps of~~:

(a) establishing a plurality of performance objectives and a plurality of best practice rules for ~~said a~~ Web infrastructure;

(b) establishing a search space and a current configuration performance index value within said search space;

(c) searching a database of available hardware models for ~~finding~~ a best-fit configuration based on said established plurality of best practice rules and based on said established current configuration performance index value, each hardware model having an associated relative performance index value;

(d) calculating performance data of said found best-fit configuration using a performance simulator;

(e) comparing said calculated performance data to said established plurality of performance objectives; and

(f) if in response to said calculated performance data ~~meeting~~ ~~meet~~ said established plurality of performance objectives, designating said best-fit configuration as an said optimum hardware configuration; ~~and otherwise, repeating steps (b) thru (f) until said search space is exhausted.~~

in response to said calculated performance data not meeting said established plurality of performance objectives, narrowing said search space and repeating steps (b) thru (f) until said search space is exhausted or a best-fit configuration is designated.

2. (Original) The method of claim 1, wherein said plurality of performance objectives comprises system throughput objective, response time objective, resource utilization objective, and number

of concurrent users objective.

3. (Currently Amended) The method of claim 1, wherein ~~said the~~ plurality of best practice rules comprises Symmetric Multi Processor (SMP) Size Rules, and Vertical vs. Horizontal Solution Rules.

4. (Currently Amended) The method of claim 1, wherein said search space comprises a set of available hardware models, the hardware models having an associated relative performance index value ranging between a lower limit performance index value and an upper limit performance index value~~lower limit and an upper limit for performance index of said optimum hardware configuration.~~

5. (Currently Amended) The method of claim 1, wherein said database of available hardware models comprises a plurality of hardware brands, a plurality of hardware models within each said plurality of hardware brands, and a relative performance index value for each of said plurality of hardware models.

6. (Currently Amended) The method of claim 1, wherein said best-fit configuration conforms to said established plurality of best practice rules and has a performance index value within a delta range of said established current configuration performance index value.

7. (Currently Amended) The method of claim 1, wherein said current configuration performance index value is established by taking the average of ~~said a~~ lower limit and ~~said an~~ upper limit of said search space.

8-10. (Canceled)

11. (Currently Amended) A computer system for autonomic identification of an optimum hardware configuration for a Web infrastructure, said computer system comprising: a computer; and one or more computer programs executed by said computer system for ~~performing the steps~~ of:

(a) establishing a plurality of performance objectives and a plurality of best practice rules for ~~said a~~ Web infrastructure;

(b) establishing a search space and a current configuration performance index value within said search space;

(c) searching a database of available hardware models for ~~finding~~ a best-fit configuration based on said established plurality of best practice rules and based on said established current configuration performance index value, each hardware model having an associated relative performance index value;

(d) calculating performance data of said found best-fit configuration using a performance simulator;

(e) comparing said calculated performance data to said established plurality of performance objectives; and

(f) if in response to said calculated performance data ~~meet~~ meeting said established plurality of performance objectives, designating said best-fit configuration as an said optimum hardware configuration; ~~and otherwise, repeating steps (b) thru (f) until said search space is exhausted.~~

in response to said calculated performance data not meeting said established plurality of performance objectives, narrowing said search space and repeating steps (b) thru (f) until said search space is exhausted or a best-fit configuration is designated.

12. (Original) The computer system of claim 11, wherein said plurality of performance objectives comprises system throughput objective, response time objective, resource utilization objective, and number of concurrent users objective.

13. (Currently Amended) The computer system of claim 11, wherein ~~said~~ the plurality of best practice rules comprises Symmetric Multi Processor (SMP) Size Rules, and Vertical vs. Horizontal Solution Rules.

14. (Currently Amended) The computer system of claim 11, wherein said search space comprises a set of available hardware models, the hardware models having an associated relative performance index value ranging between a lower limit performance index value and an upper limit performance index value ~~lower limit and an upper limit for performance index of said optimum hardware configuration.~~

15. (Currently Amended) The computer system of claim 11, wherein said database of available hardware models comprises a plurality of hardware brands, a plurality of hardware models within each said plurality of hardware brands, and a relative performance index value for each of said plurality of hardware models.

16. (Currently Amended) The computer system of claim 11, wherein said best-fit configuration conforms to said established plurality of best practice rules and has a performance index value within a delta range of said established current configuration performance index value.

17. (Currently Amended) The computer system of claim 11, wherein said current configuration performance index value is established by taking the average of a ~~said~~-lower limit and said ~~an~~ upper limit of said search space.

18. (Currently Amended) An article of manufacture comprising a program storage device readable by a computer system and tangibly embodying one or more programs of instructions executable by said computer system to perform a method steps for autonomic identification of an optimum hardware configuration for a Web infrastructure, said method steps comprising the steps of:

(a) establishing a plurality of performance objectives and a plurality of best practice rules for ~~said a~~ Web infrastructure;

(b) establishing a search space and a current configuration performance index value within said search space, said search space comprising a set of available hardware models, the hardware models having an associated relative performance index value ranging between a lower limit performance index value and an upper limit performance index value;

(c) searching a database of available hardware models for ~~finding~~ a best-fit configuration based on said established plurality of best practice rules and based on said established current configuration performance index value;

(d) calculating performance data of said found best-fit configuration using a performance simulator;

(e) comparing said calculated performance data to said established plurality of performance objectives; and

(f) if in response to said calculated performance data ~~meet~~ meeting said established plurality of performance objectives, designating said best-fit configuration as an ~~said~~ optimum hardware configuration; and otherwise, repeating steps (b) thru (f) until said search space is exhausted. in response to said calculated performance data not meeting said established plurality of performance objectives, narrowing said search space and repeating steps (b) thru (f) until said search space is exhausted or a best-fit configuration is designated.

19. (Original) The article of manufacture according to claim 18, wherein said plurality of performance objectives comprises system throughput objective, response time objective, resource utilization objective, and number of concurrent users objective.

20. (Currently Amended) The article of manufacture according to claim 18, wherein ~~said~~ the

plurality of best practice rules comprises Symmetric Multi Processor (SMP) Size Rules, and Vertical vs. Horizontal Solution Rules.

21. (Canceled).

22. (Currently Amended) The article of manufacture according to claim 18, wherein said database of available hardware models comprises a plurality of hardware brands, a plurality of hardware models within each said plurality of hardware brands, and a relative performance index value for each of said plurality of hardware models.

23. (Currently Amended) The article of manufacture according to claim 18, wherein said best-fit configuration conforms to said established plurality of best practice rules and has a performance index value within a delta range of said established current configuration performance index value.

24. (Currently Amended) The article of manufacture according to claim 18, wherein said current configuration performance index value is established by taking the average of ~~a said~~ lower limit and ~~an said~~ upper limit of said search space.